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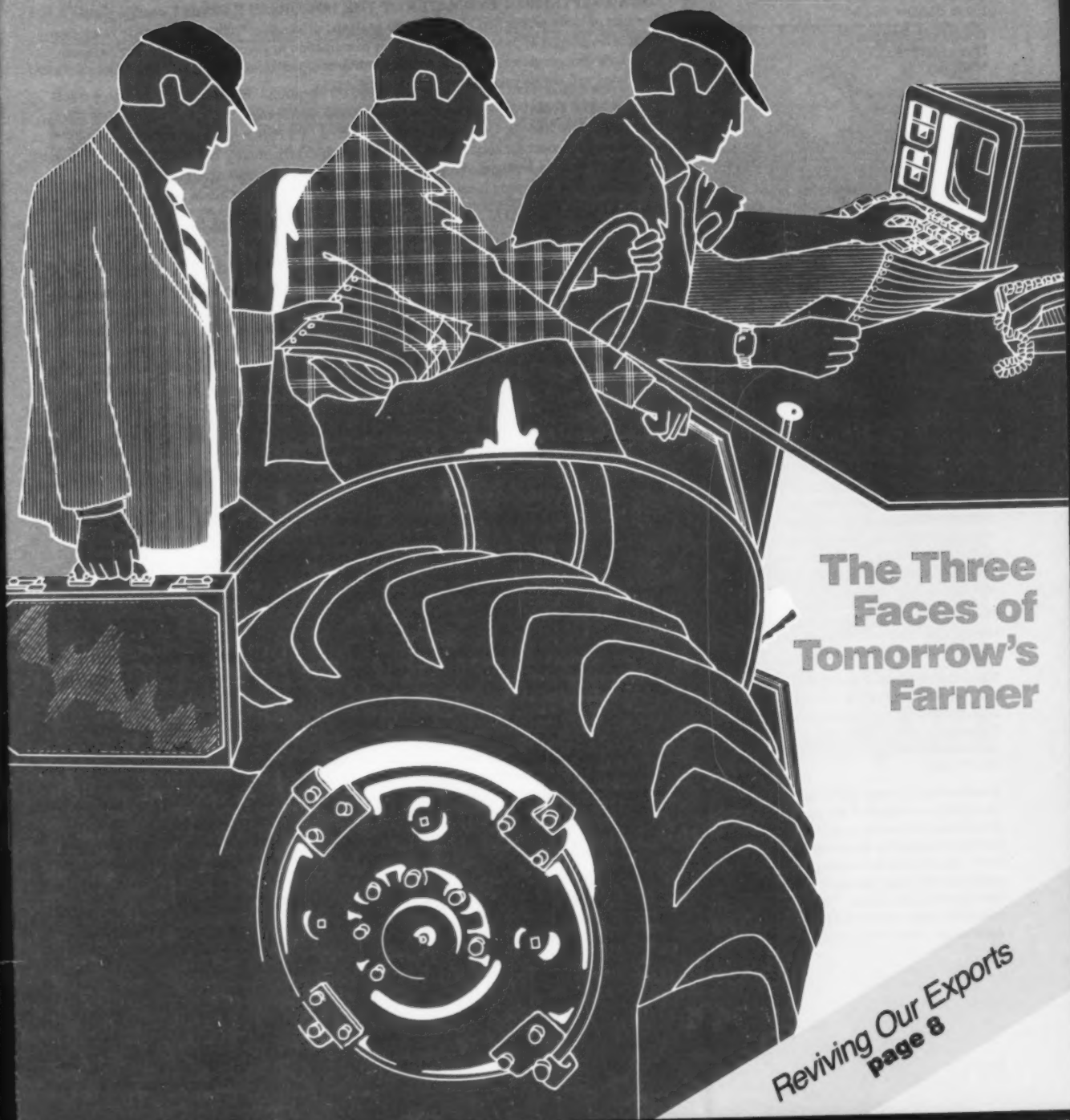

The Three Faces of Tomorrow's Farmer

Reviving Our Exports **page 8**

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PERSPECTIVES

USDA'S SEPTEMBER ESTIMATES OF THE 1986 GRAIN HARVEST confirm earlier forecasts of lower production. According to analysts, production declines will largely result from fewer acres planted as farmers increased their participation in government commodity programs. Even with stronger domestic and export demand in prospect for the year ahead, the output reductions will not be enough to eliminate large stocks.

The U.S. feed grain crop is forecast at 252 million metric tons, down 8%—yet second only to last year's record harvest. Corn will supply about 83% (8.3 billion bushels) of the total, while sorghum will account for about 9% (873 million bushels). The barley crop—which accounts for only 1% of the total feed grain crop—is forecast to reach a new high of around 626 million bushels this year, following record production in 1984 and a near-record in 1985.

Corn yields are expected to average about 120 bushels an acre, topping last year's record of 118 bushels. Yields for sorghum—at 64.7 bushels an acre—will be the second highest in history.

Economists forecast an increase in world coarse grain trade this season. Trade in 1985/86 was the lowest in 10 years. Good crops in many importer and competitor countries caused world imports to drop 19%, and the U.S. share to decline dramatically to only 43% of the market. Most signs for 1986/87 indicate improved demand for U.S. grain with the U.S. share pegged at 51% by ERS economists. With lower loan rates anticipated (because of farm bill provisions), many importers have been holding off buying until prices completely adjust, economist David Hull explains.

For wheat, average yields for all varieties may drop almost 3 bushels an acre to 34.8 bushels from last season, giving this season's wheat yield a ranking of the fifth highest. Participation in the 1986 acreage reduction program, at 84%, plus less-than-ideal weather conditions in winter wheat growing areas, reduced the 1986 U.S. wheat harvest to a 7-year low, now estimated at around 2.12 billion bushels, a 13% decline from last year.

Even with the smaller wheat harvest, a record supply, forecast at slightly more than 4 billion bushels, is available for the 1986/87 marketing year. That includes this year's production, plus huge surpluses left over from prior seasons. Economists explain that domestic wheat production, aided by generally good growing conditions, has hit records in 2 of the last 6 years and near-records in all other years since 1980. The result: excessive stocks. The increased carryin and this year's expected near-record harvest of hard red spring wheat will overshadow reduced hard red winter output, resulting in a record supply of around 3 billion bushels of bread-making wheat. Soft wheat stocks (used mostly for crackers and cakes) will probably decline about 6% from last season due to the short soft red winter harvest. Durum (pasta wheat) supplies will represent about 2 years of normal use.

The outlook for wheat use this season looks brighter than last year, according to economist Allen Schienbein, because prices are at their lowest level in 8 years. U.S. exports are expected to rise 26% from 1985/86, when they posted their steepest yearly decline on record. The Export Enhancement Program and other credit programs will make U.S. wheat more competitive in world markets, Schienbien says, with the likely result of increasing total shipments to near 1.15 billion bushels. Lower wheat prices, induced by a drop in the loan rate from $3.30 to $2.40 a bushel, should also increase domestic use to slightly above 1985/86's volume. Nevertheless, total disappearance during 1986/87 may be about equal to 1986 production, again leaving large carryover stocks.

The 1987 winter wheat crop is beginning to take shape as growers start seeding in some areas. The acreage reduction program offered for this crop requires participating growers to idle 27.5% of their wheat base acreage. Farmers who comply will be entitled to a $4.38-a-bushel target price, the same as in 1986. The loan rate is reduced to $2.28.

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The successful farmers of the future will be better managers than today's farmers—production managers, marketing managers, and financial managers. Here's a look at some of the new strategies, skills, and priorities that may be required to survive and prosper in the years ahead.

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Farm machinery sales will drop for the seventh straight year, and USDA analysts don't see a quick recovery, even when farm financial conditions start improving.

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Last year, our share of South Korea's farm imports fell below 50 percent for the first time in two decades. But U.S. exporters shouldn't give up on the long-term potential of this fast-growing, top 10 market.

Reviving Agricultural Exports: Why Is It Taking So Long? *by Eric Van Chantfort* 8

The campaign to revive U.S. agricultural exports has been given "the highest priority," but don't expect overnight miracles, say trade analysts. It took several years for exports to sink to their present level, and it will also take time to reverse the negative forces still affecting world trade.

Developing Countries Develop Into Major U.S. Market *by Eric Van Chantfort* 11

Trade trends show a dramatic shift in the destinations and distribution of U.S. agricultural exports. In the last few years, the world's less developed countries have overtaken the "developed" nations as the leading importers of U.S. grains and feeds.

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Survival Skills for Tomorrow's Farmer

Surviving and prospering. That's the name of the game in agriculture, as in any business. The farmers who intend to thrive in the challenging environment of the late 20th century may have to develop new strategies, skills, and priorities that weren't necessary in past generations.

In a recent report on the prospects for agriculture in the late 1980's and 1990's, Thomas Miller, Warren Trock, and Danny Smith describe the successful farmer of the future, and the demands that he, or she, is likely to face. Miller is an agricultural economist with USDA's Economic Research Service. He is stationed at Colorado State University, Fort Collins. Trock and Smith are professors there. Here are some of their thoughts and observations on what it will take to survive and prosper in the years ahead.

The successful farmers of the future will be better managers than today's farmers—production managers, marketing managers, and financial managers. In other words, they'll be highly skilled at obtaining both technical and economic efficiency.

On the technical side, they'll seek always to squeeze the "last drop" of benefit out of each unit of input, whether land, labor, chemicals, or machinery. New technologies in both crops and livestock will enable them to monitor the production process and maintain peak efficiency.

Although the prices farmers receive for their products will probably continue to fall in relation to the prices they pay for their inputs, this ratio has been drifting downward for decades. Greater productivity from improved inputs made up the difference. There is no reason to think that future downward pressure on prices will prevent efficient farmers from maintaining net farm income at acceptable levels in most years.

Financial Managers, Too

But focusing on technical efficiency alone will not get the job done. Farming is becoming more risky, and capital requirements are higher than they are in other industries. Thus, business expertise in general, and particularly financial management skills to operate in a high risk environment, will be every bit as important as production skills.

The ever-changing business environment will require proficient use of accounting, financial statements and analyses, budgeting and planning, and sophisticated office management procedures. The successful farmers will better understand the risks of the economic and financial environment and utilize the best available marketing and financial management techniques to counter or control those risks.

Financial management skills will be every bit as important as production skills.

On the business side, the emphasis will be on controlling costs and maximizing net income from each farm enterprise, rather than on maximizing volume and gross sales. For example, attention will shift to obtaining higher calving percentages and weaning weights rather than more cows, limiting applications of fertilizer to maximize net returns rather than yields, and producing crops with the most efficient machinery rather than the largest.

Increasing price variability in world markets will intensify the need for reliable marketing information and forecasts. While such information is provided by USDA and many other public and private institutions, the greater level of price uncertainty will strengthen the incentive for farmers to acquire their own information.

Furthermore, emerging technologies in telecommunications and microcomputer systems will offer farmers instant access to the best information available for making production, marketing, and financial decisions. The ability to accumulate accurate, detailed information and to form reliable expectations from this information will become crucial to survival in a farm business.

Opportunities Along with Risks

Increased fluctuation in financial conditions and markets will present opportunities for gains as well as losses. Successful farmers will be those who maintain the resiliency to survive during the busts so they are in a position to take advantage of the booms. This resiliency will be reflected in the way farm investment is financed, in the organizational structure of the farm, and in the use of technologies so that production can respond to changing conditions.

Structurally, the adjustment seems to be away from the savings-financed sole proprietorships that have long been traditional to U.S. family farming. Partnerships and family-held corporations are, to some extent, replacing the sole proprietorships for commercial-size farms. At the same time, debt financing is declining as the principal means of acquiring the resources necessary for farming. Leasing and various methods of outside equity financing are growing in importance.

Overall, these changes appear to represent the slow emergence of a more "industrial" type of business organization and financial structure in agriculture. Whatever drawbacks this may have—outside financing, for instance, may entail some loss of control over assets by farmers—it should improve the financial resiliency of the agricultural sector. Resilient farms will provide the agricultural industry of tomorrow with the ability to adjust to an unstable environment.

Although the future is impossible to predict, the present farm crisis seems to be the painful part of a permanent shift to a new baseline environment for agriculture. If so, it should be noted that American farmers have successfully adapted to changes of this magnitude in the past. Moreover, many farmers—a majority, in fact—have already made adjustments to position themselves so they can survive, and prosper, in the challenging economic and financial environment of the next few decades. □

*[A copy of the report on which this article is based, **Future Prospects for Agriculture in Colorado and the United States,** Bulletin 533A, is available for $3 from Cooperative Extension, 171 Aylesworth S.W., Colorado State Univ., Fort Collins, CO 80523.]*

Farm Machinery Sales Still Stalled

For farm machinery manufacturers and dealers, the long-anticipated light at the end of the tunnel hasn't even flickered.

Sales have been stuck in reverse since the decade began, and 1986 looks like more of the same. Spending by farmers on new and used equipment is expected to drop for the seventh straight year.

Farmers' expenditures probably will range somewhere around $4.8-$5.1 billion, estimates economist Carlos Sisco of USDA's Economic Research Service. That, he says, would be the fewest dollars spent since 1972.

The 1970's were the growth years for farm machinery, with sales peaking at $11.7 billion in 1979. Then the market started shrinking. Last year, farmers purchased an estimated $5.7 billion worth of farm equipment, less than half of 1979's record outlays.

"For most machinery categories, unit sales of new equipment are projected to fall sharply this year," Sisco says. "Sales volume is expected to drop 10 to 20 percent for new two-wheel-drive farm tractors (over 40 horsepower) and about 33 percent for four-wheel-drive units." Sisco and his colleagues also expect a decline of around one-third in unit sales of new grain harvesting equipment and somewhat smaller declines for most forage and haying equipment.

Manufacturers have closed a number of plants, temporarily shut down others, curtailed work schedules, and discounted prices to reduce their large machinery inventories. As a result, inventory levels have dropped some in the past year, even with the continued sales slump, says Sisco. Nevertheless, stocks of unsold items remain high, with manufacturers holding a 1- to 2-year supply (based on current sales volume) for most machinery categories.

Does all this jeopardize the future productivity and efficiency of American farms? So far, probably not, say most analysts. Sagging sales of brand new units don't necessarily mean that farmers are allowing their machines to become obsolete.

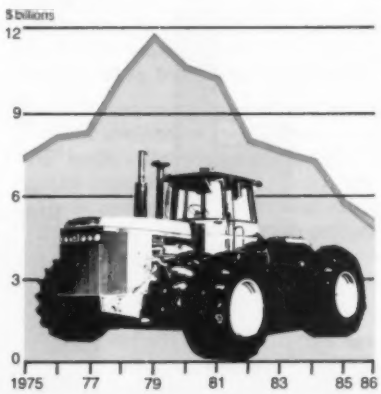
There's a large supply of good-quality used machinery available at very attractive prices—and, at least in the case of tractors, a majority of expenditures are now going for used rather than new machinery. In 1980, about 60 percent of farmers' total purchase outlays for farm tractors went for new tractors. By last year, the balance had shifted. More than half—55 percent—of the dollars were spent on used tractors.

Certainly, that's no help to manufacturers, who've been hit hard not only on the domestic front, but also by a deteriorating trade situation. The value of U.S. machinery exports last year dropped to less than $1.9 billion, the lowest level since 1978. At the same time, the U.S. farm machinery trade balance (exports minus imports) slipped beneath $300 million. As recently as 1981 and 1982, the U.S. surplus in farm machinery trade hovered around $1.2 to $1.4 billion.

Trade data for the first quarter of 1986 were worse yet. Imports climbed above exports, and the balance turned negative, registering an "unprecedented" $41 million deficit, Sisco notes.

Part of the problem, he explains, stems from the decision by U.S. manufacturers to specialize in the production of large tractors, and to shift production of smaller tractors overseas. The decision seemed justified in the 1970's because of the rapidly expanding demand for large, high-powered machinery in the United States and Canada. In addition, the establishment of foreign subsidiaries for the production of smaller equipment allowed U.S. manufacturers to get around foreign trade barriers so they could compete more effectively in world markets. The demand for smaller tractors (40 to 99 horsepower) is three times larger in Europe than in the United States.

Farm Machinery Purchases Still Dropping



1985 preliminary; 1986 forecast.

In the last several years, however, this strategy has tended to limit the markets for U.S.-made machinery to the relatively few nations that can use the large, specialized equipment. U.S. plants have also become more dependent on orders for parts for foreign subsidiaries, and on orders for special-purpose equipment for large-scale but limited-duration projects (irrigation development in Saudi Arabia, for instance).

The trouble is that many U.S. markets have recently trimmed their purchases for various reasons, while imports of smaller tractors from Europe and Japan have remained strong. These developments are all reflected in the U.S. machinery trade balance.

But as important as exports are, the domestic market is much larger, and analysts generally see little basis for optimism in the next year or two.

"Many of the fundamentals are still negative, including the need to pay off some of the large debt accumulated by the farm sector," says economist Michael Hanthorn, another ERS analyst.

"When economic conditions in the sector begin to pick up, the farm machinery market eventually will improve," he says. "The catch is that farmers are probably not going to run right out and buy new tractors. Farmers and their lenders will want some of the debt incurred in recent years to be paid off first."

In his view, there could be a lag of a year or more before a pickup in farm financial conditions begins to be reflected in the farm machinery market. □

The South Korean Market: A Look Beyond the Recent Slump

Once one of the world's poorest countries, South Korea has emerged as a major exporter of manufactured goods. It has even introduced a new car, called Hyundai, onto the North American market.

And along the way to becoming a "Pacific Rim" power proud of its economic might and growing world prestige (symbolized by its selection as the site of the 1988 Summer Olympics, for example), South Korea has also been transformed into a major market for U.S. farm products.

The fact that sales are down now—and may stay weak for the next few years—doesn't dampen the long-term optimism held by analysts.

U.S. farm sales slipped from a 1983 peak of $1.8 billion to $1.4 billion in 1985, largely reflecting a South Korean effort to diversify its suppliers. Despite this recent drop in U.S. sales, South Korea remains a solid market with considerable long-term growth potential.

"U.S. exporters shouldn't allow the current downturn to deceive them into thinking that all the opportunities have passed. South Korea's growing population, continued heavy reliance on imports, and strong relations with the United States all point to a positive trade picture," says economist Don Sillers, an Asian analyst with USDA's Economic Research Service. "Feed grains and oilseeds should continue to enjoy strong demand."

Sillers also suggests that the size of the South Korean market may sometimes be overlooked in the recent concern over falling farm sales. South Korea, he says, is still one of America's top ten customers for agricultural products.

A Success Story

The South Korean economic success story has been practically without parallel. Devastated by the Korean War (1950-53), Korea "limped through the 1950's, dependent on massive U.S. economic aid." A lot has changed since then, says Sillers.

"Korea promises to show a higher long-term rate of economic growth than most other major U.S. agricultural markets," says Sillers. "Because of its present importance and possibilities for further growth, the Korean market deserves close attention by U.S. agricultural interests."

At the moment, he says, U.S. concern should center on maintaining a strong market presence, preserving our present position for later, long-term opportunities.

The United States held a 67-percent share of the Korean agricultural import market in 1983. But that share had shrunk to 49 percent by the end of last year. Prodded by lower prices from U.S. competitors, the South Koreans have put into practice a long-held desire for greater diversification among suppliers.

High prices for U.S. corn appear to have pushed diversification along in the last few years. The trend could be seen in Korea's substantial purchases of corn from the People's Republic of China as early as 1984.

"In 1983, 97 percent of South Korea's corn imports came from the United States," says economist Sophia Huang, another Asian analyst with the Economic Research Service. "By 1985, that share stood at 49 percent."

Meanwhile, feed-quality wheat from Australia and Canada has been substituted as an ingredient in livestock feed, displacing some U.S. corn.

U.S. corn sales will likely pick up a bit by the end of the year.

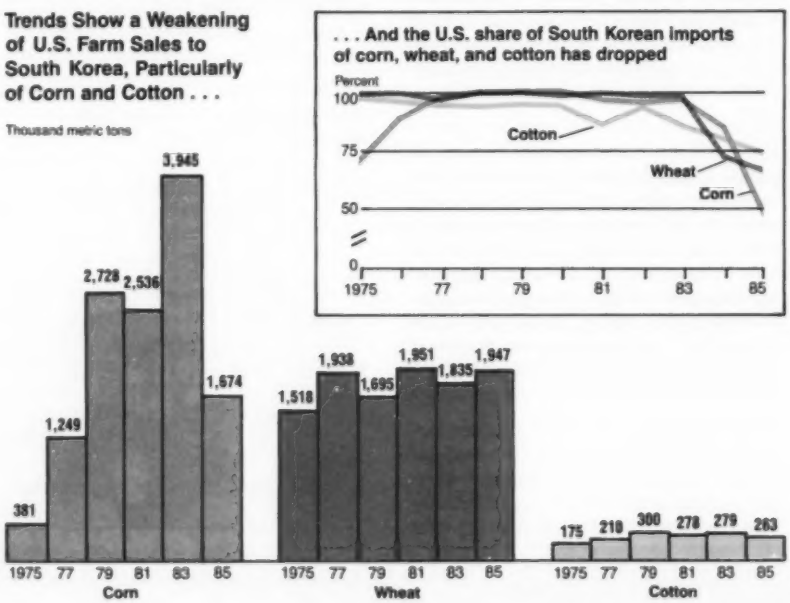
"The U.S. share of South Korea's farm imports, which fell below 50 percent for the first time in more than 20 years, is expected to recover somewhat toward the end of 1986 as U.S. cotton prices come more into line with world prices," says Huang.

U.S. soybean sales, too, will probably rise to meet increased livestock feeding in South Korea.

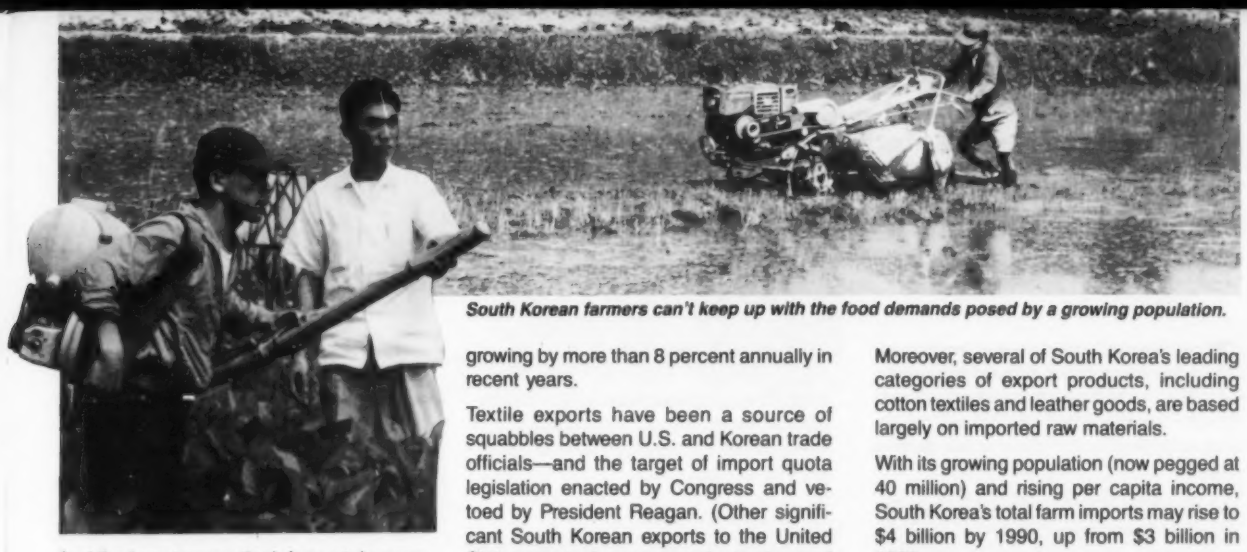
Even so, the U.S. share will probably never approach the 67-percent level again.

"The South Korean perspective is that relying on U.S. corn for almost all of their feed grain supply, for example, makes them too dependent on one crop and one supplier," says Sillers.

Trends Show a Weakening of U.S. Farm Sales to South Korea, Particularly of Corn and Cotton . . .



. . . And the U.S. share of South Korean imports of corn, wheat, and cotton has dropped



South Korean farmers can't keep up with the food demands posed by a growing population.

And the long-term outlook for certain commodities is decidedly poor.

"Wheat imports are unlikely to grow and may fall. Significant rice imports are also unlikely since South Korea has largely become self-sufficient in this commodity. Raw cotton imports are likely to grow slowly because of increasing competition in world textile and garment markets, and growing trade barriers to South Korea's exports of these products," Sillers says.

But the United States also has a problem selling processed foods and other high-value items such as fruits and vegetables because of tough trade barriers. Sillers says, however, that tied to trade negotiations to tone down such barriers, aggressive marketing might make inroads into these areas.

Strong Political Ties

One factor favoring good trade relations is a powerful political relationship. The United States and South Korea have political ties that are stronger than the bonds between most nations.

The most obvious connection, perhaps, is the presence of some 37,000 U.S. troops permanently stationed in South Korea.

"The political dimension is very important in looking at trade relations between the two countries," says Sillers. "There is a lot at stake in this political relationship, and both countries are very aware of this."

That political dimension can apparently transcend even the troubles in textile trade between the United States and South Korea.

Recently, the two countries concluded an agreement limiting the growth of Korean textile exports to the United States to less than 1 percent a year. By contrast, Korean textile sales to the United States had been growing by more than 8 percent annually in recent years.

Textile exports have been a source of squabbles between U.S. and Korean trade officials—and the target of import quota legislation enacted by Congress and vetoed by President Reagan. (Other significant South Korean exports to the United States are steel, consumer electronics, and a few agricultural products like tobacco and ginseng.)

But the political ties don't mean the United States can stop trying to be a savvy trader, Sillers cautions. That's become clear from the recent drop in the U.S. share of the South Korean market.

"Our market share in South Korea is matched in very few other countries, but it will continue to erode without intelligent market development efforts," he says.

One factor that should certainly help, say the analysts, is the Food Security Act, commonly called the 1985 farm bill. That bill is the reason for optimism about a year-end boost in cotton sales to South Korea.

Mandating lower support prices for cotton, the farm bill is bringing U.S. cotton prices more in line with world prices, says Huang.

That should also be the case with other U.S. commodities, including corn, which are covered by the farm bill's lowering of support prices.

Rising Incomes

The country's import growth has ridden the crest of rapid industrialization that started in the early 1960's, boosting personal income.

"Rising household incomes have led to increased demand for meats, grains, and other foods," Sillers says. "However, the densely populated, mountainous nation has been unable to produce enough wheat to meet consumer demand, or to produce enough feed grains and oilseeds to meet the demand for feedstuffs from domestic producers of meats, eggs, and milk."

Consequently, the country has relied on imports to close the gap between the domestic demand and supply of these products.

Moreover, several of South Korea's leading categories of export products, including cotton textiles and leather goods, are based largely on imported raw materials.

With its growing population (now pegged at 40 million) and rising per capita income, South Korea's total farm imports may rise to $4 billion by 1990, up from $3 billion in 1983.

Demographic trends in Korean society are favorable for additional trade as well.

"The Korean market for U.S. food products is mostly an urban one," says Sillers. "And the heavy rural migration to the cities expected in the late 1980's will push the growth of the crucial urban market ahead of that of the population as a whole."

The changing role of women in Korean society is also changing food consumption patterns.

"To help slow population growth, the government is trying to discourage large families. This will also probably shift their time out of the home and away from cooking, thereby increasing demand for convenience foods and food away from home and weakening reliance on the staple, cooked rice," Sillers says.

"And as Korea's present large number of teens reach adulthood and form families, the number of household heads who have acquired a fondness for foods traditionally absent or rare in the Korean diet, including meats and dairy products, will increase."

Such societal changes should bolster U.S. sales of feed grains and oilseeds to build livestock and dairy herds for meat and milk, and may offer some openings to U.S. exports of processed and high-value products—now effectively barred by trade barriers.

"If we can negotiate a reduction in trade barriers to, say, fruits and vegetables and value-added processed products," says Sillers, "we could begin to supply some more products." □

[*Based primarily on information provided by economists Donald Sillers and Sophia Huang of the International Economics Division, Economic Research Service.*]

Reviving U.S. Exports: Why Is It Taking So Long?

The campaign to revive U.S. agricultural exports has been called "the highest priority," "the most essential of goals," and "one of the major tasks before us" all the way from the Great Plains to the nation's capital.

Key elements of this campaign include the reduction in loan rates to improve U.S. competitiveness, expanded export credit and promotion programs, and efforts to hold down the dollar's value on world currency markets. Other steps focus more on individual competitors or customers—a harder line with the European Community, negotiations to lower Japan's import barriers, and the recent incentives to encourage the Soviets to fulfill their purchase agreement for 4 million tons of U.S. wheat in fiscal 1986.

The results have left many trade analysts mystified.

They are surprised not by the failure to achieve an immediate, dramatic, across-the-board export recovery. They are puzzled, rather, that hope, optimism, and determination seem to have given way so quickly to disappointment, frustration, and impatience.

Whether or not these particular initiatives prove effective, say analysts, any verdict at this time would be premature.

In the first place, one of the most promising actions, bringing U.S. prices down to competitive world levels, has only just begun to take effect with the beginning of the new crop years (June 1 for wheat, August 1 for cotton, and September 1 for corn, sorghum, and soybeans). And, if forecasters are correct, U.S. export volume of grains and cotton will respond with a substantial rise in the year ahead.

But don't expect miracles, advise the economists. Export earnings will remain depressed next year, and, whatever actions are taken, American efforts still have to fight an uphill battle to reverse some fundamentally negative forces in world trade.

What are these negative forces, where did they originate, and what will ultimately be required to return exports to the growth track? In answering these questions, economist Steve MacDonald and other analysts of USDA's Economic Research Service bring to light some of the complexities of international trade, the obstacles to renewed export growth, and the uncertainties that lie ahead.

Years of Confidence

Just 5 years ago, the analysts remind us, no one would have taken you seriously had you predicted that tumbling exports would soon be one of American agriculture's most vexing problems.

In the 1981 fiscal year, U.S. exports of farm products earned a record $43.8 billion. Many forecasters were projecting $50 billion in exports by the mid-1980's. Earnings had set twelve consecutive records beginning in 1970, when sales totaled less than $7 billion. In the same period, the volume of U.S. agricultural exports had climbed from around 60 million metric tons to more than 160 million.

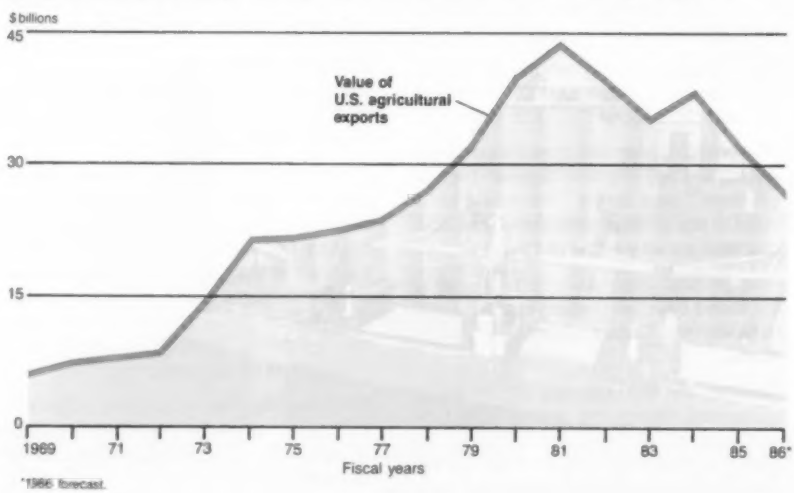
By the time the 1980's began, it was virtually taken for granted that each year would mark another high. Many people, observing the rapid growth in global population, had even started to worry that surging world demand might soon outstrip the productive capacity of the American farmer—and push up domestic food prices. Questions were raised about the possible future rationing of exports to protect the pocketbooks and the food supplies of American consumers.

Confidence in the world's dependence on U.S. farm products contributed to a willingness to use food as a foreign policy instrument. Some farm groups, for example, proposed "a bushel for a barrel" to make OPEC pay for driving up oil prices. In early 1980, the United States placed an embargo on additional grain shipments to the USSR in response to the Soviet invasion of Afghanistan.

The dramatic growth in the volume of U.S. agricultural exports during the 1970's—8 percent per year, on average—had a number of causes. One factor was a relatively inexpensive U.S. dollar on world currency exchange markets. The more dollars a nation could buy with its currency, the more American products it could afford to import.

Two other factors were steady growth in world population and impressive gains in per capita incomes, especially in less developed nations. More people, with more money to spend, translated into a demand

Until the Slump, U.S. Agricultural Exports Set Records for 12 Straight Years



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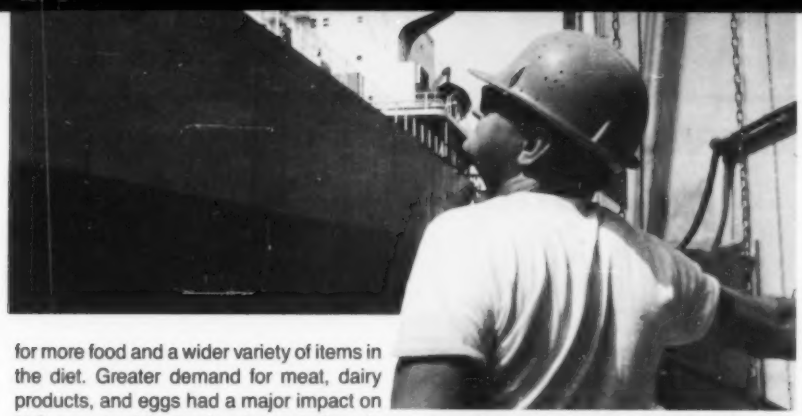


What are the forces that are dragging down U.S. exports, where did these forces originate, and what will ultimately be required to return exports to the growth track?

for more food and a wider variety of items in the diet. Greater demand for meat, dairy products, and eggs had a major impact on U.S. exports of the feed grains and oilseeds needed by these nations to establish and maintain livestock and poultry sectors.

Another stimulant to U.S. exports involved political decisions in the Soviet Union, Eastern Europe, and China to improve the diets of their people by buying from the West. Still other factors included tens of billions of dollars in credit extended to less developed countries, increased foreign exchange earnings in these countries as the industrialized nations bought more of their products and the prices for these products rose, the stimulative impact of oil revenues on imports of oil-producing nations, and, of course, the large supplies of agricultural products available from the United States.

Derailed from the Growth Track

It was true that many dozens of nations had come to depend on the productivity of America's farms. The reverse was also true: A great many American farms had come to depend on growing export markets. The risks inherent in that dependence have become apparent in the last few years.

From fiscal 1981's peak of $43.8 billion, U.S. agricultural exports fell to $31.2 billion last year—nearly a 30-percent drop. Export volume tumbled from a 1980 high of 163.9 million metric tons to 125.7 million last year. Both volume and value have dropped again this year—value to an estimated $26.5 billion and volume to around 108 million tons.

Again, economists suggest that several factors came together to derail U.S. exports from the growth track. The economies of the United States and other industrialized nations were plunged into recession at the start of the decade, partly as a result of high oil prices and U.S. efforts to stem an inflationary spiral in its domestic economy. The curtailment of imports, overseas investment, and lending by the industrialized nations quickly spread the recession.

The less developed countries, which depend on export earnings and credit to finance their imports, saw their markets shrink and the prices for their commodities drop. Meanwhile, tighter credit and sharply rising interest rates aggravated the debt situations of many poorer nations, until interest payments were eating up a huge portion of their diminished export revenues. The widening recession reduced the buying power of individuals and entire nations, effectively depressing the demand for food imports and the overall volume of world agricultural trade.

The recession and its consequences were major factors, but certainly not the only ones. The embargo of the Soviet Union hurt U.S. sales, at least temporarily. The U.S. competitive position in world markets was also damaged as the relatively "cheap" U.S. dollar of the 1970's began to move steadily in the other direction. The dollar eventually appreciated more than 30 percent in our major agricultural markets before it began to slowly turn back down again last year.

At the same time, a series of fixed increases in U.S. price supports had been mandated by the 1981 farm bill, which assumed continued high rates of inflation and continued growth in world demand. As world demand weakened, the price floor under major U.S. farm commodities was rising, giving an edge to competitive suppliers and providing a "price umbrella" that encouraged greater production abroad. U.S. actions to reduce output and improve the global supply-demand balance were offset by output gains in other nations.

These and other factors—including the successes of the "Green Revolution"—affected the trade environment, in part by bolstering foreign efforts to achieve greater self-sufficiency. Not only Europe, but other parts of the world including India and, most recently, China, have made significant progress in reducing dependence on food and feed imports. Total foreign grain production has set records in 3 of the last 5 years.

The 1980's are different, as well, in that American traders face more competition in more product areas. Partly because of its big advantage in bulk commodities, the United States perhaps failed to expand its competitive range as much as it could have during the 1970's. Some analysts say the United States didn't take full advantage of the relatively fast growing trade in high-value processed products, didn't move aggressively enough in pursuing emerging markets for new products, and has been somewhat slow in appealing to the special preparation and packaging preferences of foreign customers. More attention is now being focused on foreign consumption patterns—and on responding to foreign concerns in such areas as U.S. grain quality.

Beyond developments in world agriculture and the world economy, and aside from any faults in American policies or practices, U.S. exports have also been damaged by obstacles erected in other nations. Several nations offer preferences to other suppliers for political or economic reasons. And many have raised additional barriers to protect their own domestic markets and farm sectors, while they draw heavily on their national treasuries to subsidize exports, capture markets, and dispose of their surpluses.

Prospects for Recovery

Given all the factors affecting U.S. agricultural exports, what will it take to get them back on the growth track? Economists can already point to some positive signs. In their tentative forecasts for 1986/87, they project roughly a 25-percent increase in export volume of U.S. wheat, nearly a 30-percent rise for feed grains, and more than a tripling of cotton exports from this year's very depressed levels. Increases will be spurred by sharp declines in U.S. export prices, reflecting the reduced loan rates for major bulk commodities. But the final dollar totals on next year's exports may be less encouraging because higher sales volumes could be offset by the lower prices.

For sustained volume and value gains, analysts agree that effective export promotion, credit, and aid programs are important, as are policies to counter unfair trade practices. However, it will probably take more, they say. It will take some fundamental adjustments. *(continued on next page)*

Some of these adjustments are already occurring. The U.S. dollar, for instance, has declined substantially against several major foreign currencies, although it remains strong against the currencies of a number of countries, including Canada and Argentina. A lower valued dollar makes our exports more competitive and less expensive for foreign buyers whose currencies have appreciated against the dollar. Although a weaker dollar will provide some sorely needed relief over time, analysts also indicate that the effect of the recent declines will not be immediate because, for several years, foreign production and purchase decisions were being influenced by a rising dollar.

More important, according to many economists, are the longer term implications of provisions in the 1985 farm bill to bring U.S. commodity prices closer to market-clearing levels. Once it becomes evident that the United States won't price itself out of world markets—or set a high price floor protecting other producing nations—the other nations will recognize that they'll have to share the price consequences of their own excess production. That, in turn, will reduce the incentive to expand production abroad.

Yet here, too, the full impact won't be felt until foreign nations have had a chance to implement changes in their farm policies and production decisions in response to the more competitive U.S. posture.

USDA analysts don't have crystal balls to predict with any certainty the outcome of the new market-oriented policies, and they don't expect to see other nations slashing their production. What they do expect, however, is a slower rate of expansion in foreign production by both importers and major exporters.

"With these new policies," says economist Steve MacDonald, "it is now more likely that future increases in world import demand will benefit U.S. rather than foreign producers."

Yet a lower valued dollar and more competitive U.S. pricing policies are only part of the picture. Demand has to grow, and the rate of growth depends heavily on the health of the world economy. Though the prognosis is uncertain, there are some encouraging developments. Lower interest rates in the United States may help stimulate economic growth both here and abroad—and help reduce the repayment burden for debtor nations. Meanwhile, relatively low oil prices strengthen the economic outlook for many oil importing nations, but not so for exporters such as Mexico and Nigeria.

If a stronger world economy can be achieved and sustained, it would mean more buying power, and global trade would expand—assuming that new trade barriers aren't erected and that trade wars can be avoided. One analyst points out that world population is expected to double before the middle of the next century. The food will have to come from somewhere.

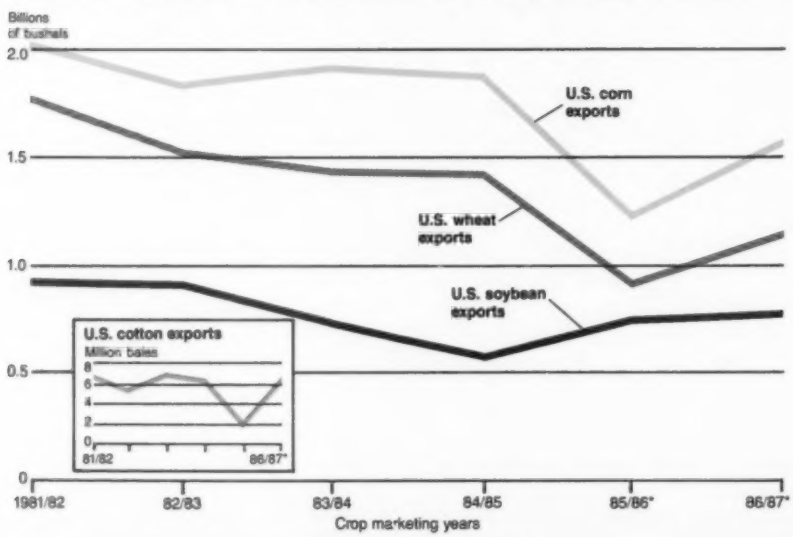
The future, like the past, will be bumpy, and the fruits of current developments may not be fully reaped for another year or two, but the stakes are high. Agricultural exports provide jobs for well over a million Americans on and off the farm. Persistent surpluses in agricultural trade help reduce persistent, and growing, deficits in nonfarm trade. Millions of people throughout the world depend on the American farmer, and their purchases, in turn, help support efficiencies in U.S. farm production that keep food prices down for the consumer. U.S. consumers, in fact, spend a smaller proportion of their incomes on food than people in any other nation.

The stakes, of course, are also high for American agriculture. More than one in every three harvested cropland acres is now producing for export, and the potential for significant demand growth is far greater for foreign than domestic markets.

Although many trade-determining factors are outside U.S. control, an export turnaround is worth working for with both determination and patience, say analysts, because a healthy future for American agriculture almost certainly depends on an expansion in international trade. □

[Based on information provided by economist Steve MacDonald and other analysts of the International Economics Division, Economic Research Service.]

If Forecasts Are Correct, U.S. Export Volume Will Turn Upward in the Year Ahead



*1985/86 estimated; 1986/87 projected as of August 1986. Projections are revised monthly.

Developing Countries Develop Into Major U.S. Market

The destinations and distribution of U.S. agricultural exports are changing, with the less developed countries of the world assuming an increasingly prominent role in U.S. trade fortunes.

For each of the last 3 years, more U.S. grains and feed were purchased by the less developed countries (LDC's) than by the traditionally larger markets of Western Europe, Japan, Canada, and the other "developed" nations.

For U.S. oilseeds, it's still the developed nations that take the lion's share (roughly two-thirds) of our exports, but their purchases have dropped sharply. Meanwhile, U.S. shipments to the LDC's are holding near record levels.

"The composition of U.S. export markets has shifted, perhaps permanently," notes economist Steve MacDonald. This shift toward a bigger role for the LDC's has been one of the more important trends in U.S. agricultural trade over the past decade.

Data from MacDonald and other trade analysts of USDA's Economic Research Service reveal the extent of this shift in the U.S. customer base.

In fiscal 1975, just over half of total U.S. grain and feed exports went to a relative handful of buyers that economists classify as the developed nations. The remaining portion was sold, mainly in smaller quantities, to more than 100 LDC's and several centrally planned countries.

The shift toward a bigger role for the LDC's has been one of the more important trends in U.S. agricultural trade.

By last year (fiscal 1985), the distribution had changed significantly. Less than two-fifths of U.S. grain and feed exports went to the developed nations, while slightly more than two-fifths went to the LDC's. Centrally planned markets (the USSR, Eastern Europe, and China) took about one-fifth of the total.

Although purchase volume has dropped sharply in the last few years for all three categories of buyers, the largest and most sustained declines have come in our developed country markets. From a fiscal 1980 peak of nearly 51 million metric tons of U.S. grains and feeds, our exports to the developed nations dropped by more than 30 percent to less than 35 million tons last year. That was the lowest volume in more than 10 years.

Of the three categories of customers, the centrally planned nations have the most volatile record of ups and downs in grain imports. Their role, too, has increased significantly relative to the developed nations, but they continue to trail far behind in total buying.

Oilseeds and products rank second only to grains in generating export revenues for U.S. agriculture. In oilseeds, the developed nations remain the largest U.S. customers by a wide margin—yet the LDC's have been closing the gap as imports by the European Community and Japan have declined.

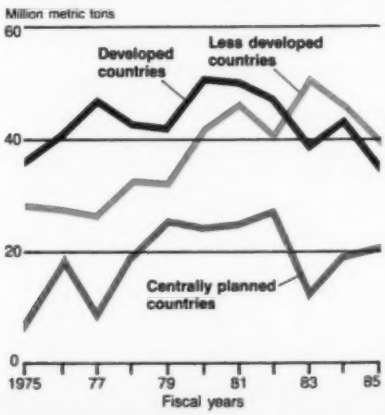
In fiscal 1975, more than 80 percent of U.S. oilseed export volume went to the developed nations, and only about 12 percent to the LDC's. By 1985, the share of U.S. oilseeds going to the LDC's had more than doubled to 30 percent.

Trade analysts recognize that Western Europe, Japan, Canada, and several other developed markets will remain among the top customers for U.S. agricultural exports. The analysts suggest, however, that the potential for future export growth is probably greater among the LDC's, as a group, than among the developed nations.

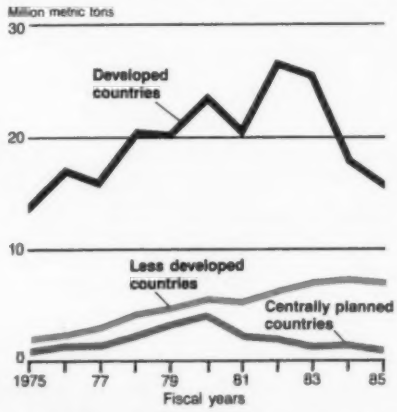
The reasons include faster population growth in the LDC's, faster growing economies in many cases (Taiwan and South Korea being prime examples), the prospective need for more feed grains and oilseeds to support emerging meat animal sectors, and resource limitations that may preclude agricultural self-sufficiency. In addition, the populations of the LDC's are not as well fed as people in developed nations, so they tend to spend a fairly large portion of any additional income on food.

"Our traditional customers remain very important," concludes MacDonald. "But we also have to recognize the increased role of our important Third World customers and the large potential role of the rest of the less developed world. Self-interest alone dictates that we pay close attention to their various needs and concerns in such areas as open markets for their products, debt relief, and economic development." □

U.S. Grain and Feed Exports to:



U.S. Oilseed Exports to:



Developed country markets include Western Europe, Canada, Japan, Australia, New Zealand, Israel, and South Africa. Centrally planned markets include the USSR, Eastern Europe, and China. Less developed country markets are all others.

EC Cuts Its Support Prices

Influenced by lower world prices, the European Community has reduced its support prices for feed grains by 5 percent for the marketing year that began July 1. The reduction covers oats, rye, barley, sorghum, and feed-quality wheat, but not corn.

"EC farmers will also be assessed a 3-percent tax on any grain they market, and stricter quality standards will be set for grain sold to EC governments under support programs," says USDA economist Stephen Sposato of the Economic Research Service. "The overall effect of these measures will be to reduce market grain prices in the EC by an estimated 9 to 12 percent."

From the American perspective, reduced EC prices are a step in the right direction. In recent years, high support prices have encouraged investment in farm equipment and research into new crop varieties, contributing to overproduction in the EC. However, because of new crop varieties and increasing farm size and efficiency, lower supports may, at best, only slow the rate of growth in EC production, says Sposato.

He notes that the EC price cut comes "in partial response to reduced U.S. loan rates under the 1985 farm bill (Food Security Act)." Lower U.S. loan rates have had a significant effect on world prices for grains. World wheat prices have declined 16 percent and feed grain prices about 12 percent when compared with fiscal 1985.

Another factor is the decline in the value of the dollar measured against European currencies. "Prices in the world grain market are quoted in U.S. dollars," says Sposato. "At current grain prices and exchange rates, every 1-percent decline in the value of the U.S. dollar adds about $12 to the cost of exporting a ton of EC wheat."

Sposato estimates that, with forecast world grain prices of between $90 to $100 per ton over the next 5 years, an additional $600 million annually would be added to the costs of the EC budget—if the EC tried to maintain prices in the face of recent dollar declines.

"The pressure of declining world market prices on the EC budget was not entirely unforeseen. Near-record grain stocks of 22.5 million tons at last season's end were causing considerable concern," Sposato says. "Yet a 5-percent reduction in prices, when the original proposal was for constant prices, is almost unprecedented. Why the change? It appears that the EC decided to make up a revenue shortfall of some $1 to $2 billion in total agricultural expenditures by altering its agricultural outlays. EC officials chose to do this largely in the grains sector."

But the price cut won't head off the EC's growing worries over its budget. "For one thing, the grains sector alone can't absorb shocks to an agricultural budget totaling more than $20 billion," Sposato says. And the budget pressure could get worse, he adds.

"For the near term, a weaker dollar, large European production, and the prevalence of low world prices influenced by the new market-oriented U.S. policies will lead the EC to increasing budgetary difficulties."

Leaders

America's Favorite Fresh Fruits: 1985's Leaders in Per Capita Consumption

	Per capita consumption			Change,
	1970	1980	1985	1970-85
	pounds per person[1]			
Bananas	17.6	20.8	25.6	+45%
Apples	16.3	18.3	17.4	+7%
Oranges	15.7	15.3	12.0	−24%
Grapes	2.5	3.3	6.3	+152%
Grapefruit	8.0	7.8	5.5	−31%
Peaches	5.6	5.4	3.8	−32%
Lemons and limes	2.1	2.3	2.9	+38%
Strawberries	1.6	1.9	2.9	+81%
Pears	1.9	2.3	2.7	+42%
Avocados	.4	.8	1.7	+325%
Nectarines	.6	1.5	1.6	+167%
Plums and prunes	1.4	1.5	1.5	+7%
Pineapples	.7	1.4	1.4	+100%

[1]Retail weight basis. 1985 data are preliminary estimates.

America's Favorite Fresh Vegetables: 1985's Leaders in Per Capita Consumption

	Per capita consumption			Change,
	1970	1980	1985	1970-85
	pounds per person[1]			
Lettuce	20.8	24.9	23.7	+14%
Onions	11.5	9.3	17.9	+56%
Tomatoes	10.5	11.4	13.4	+28%
Cabbage[2]	8.2	8.0	—	—
Carrots	5.7	6.8	7.4	+30%
Corn	7.3	6.6	7.1	−3%
Celery	6.7	7.3	6.9	+3%
Cucumbers[2]	2.9	4.0	—	—
Green peppers[2]	2.2	3.3	—	—
Broccoli	.5	1.5	2.6	+420%
Green beans[2]	1.6	1.4	—	—
Cauliflower	.6	1.2	2.0	+233%

[1]Retail weight basis. 1985 data are preliminary estimates. [2]Data not reported by USDA since 1981.

Double-Cropping in the Southeast

Nearly 30 percent of the soybean acreage in the southeastern United States is double-cropped with wheat. The figure exceeded 40 percent in at least one year—1982. Back in 1970, southeastern farmers double-cropped less than 20 percent of their soybean acreage.

In the typical system, farmers plant wheat in the fall after harvesting their soybeans. They harvest the wheat in the late spring or early summer just in time to plant a soybean crop. The additional income from harvesting wheat on the soybean field in the "off-season" potentially increases their returns.

But double-cropping requires specialized management skills, and there is more risk of reduced soybean yields. That risk must be balanced against the expected increase in net revenue from the two crops.

Conservation tillage has become one of the key strategies for reducing the risk of lower yields. Available evidence suggests that the use of conservation tillage has expanded dramatically among soybean producers, and particularly among those who double-crop. Conservation tillage is quicker than conventional tillage—an important advantage in double-cropping because of the overlap in harvesting the wheat and planting the soybeans. That shortens the growing season for soybeans, potentially reducing the yield.

The increased feasibility of double-cropping wheat and soybeans has raised the relative importance of southeastern wheat production. In the early 1970's, the Southeast produced 25 percent of total U.S. soft winter wheat. By the early 1980's, this share had risen to more than 40 percent. The double-cropped acreage has also increased the nation's overall production of soft red winter wheat, a crop in surplus since 1970.

Double-Cropping Wheat and Soybeans in the Southeast: Input Use and Patterns of Adoption *by Michele Marra and Gerald Carlson. (Published June 1986; 18 pages of text and data tables; GPO Stock No. 001-019-00453-3; $1.25.)*

Selling to Mexico

Mexico's farm imports from the United States have been above $1 billion each year since 1979, despite economic difficulties exacerbated by plunging oil prices. And Mexico will continue to rely on the infusion of imports from American farmers to feed a rapidly growing population.

That's the assessment presented in a report recently published by USDA's Economic Research Service. The report relates how the oil boom of the 1970's boosted Mexico into the ranks of the top five importers of U.S. farm products.

"Mexico's discovery and exploitation of its huge oil reserves largely led to a strong upsurge in food demand in the 1970's," says economist Myles Mielke, one of the authors.

Basic commodities—corn, dry beans, sorghum, wheat, soybeans, sunflower seed, inedible tallow, and nonfat dry milk—make up most of Mexico's imports. "The United States currently supplies nearly all of each of these commodities, except for wheat and nonfat dry milk, which come primarily from other suppliers," Mielke says.

"Mexico has been attempting to diversify its foreign suppliers," Mielke notes, "but in its present financial difficulties U.S. products are attractive because of the generous credit terms extended to Mexico. Those credit guarantees have been an effective tool for substantial U.S. exports of grains and oilseeds to Mexico."

Mielke forecasts, however, that imports of nonbasic items, including U.S. livestock, horticultural products, and processed commodities, will be reduced in the next few years. Such reductions reflect slower economic growth, the erosion of Mexico's foreign exchange earnings—caused by falling oil prices—and the country's consequent problems in paying interest on a nearly $100-billion foreign debt.

Mexico: An Export Market Profile *by Donna H. Roberts and Myles J. Mielke. (Published May 1986; 57 pages of text and tables; GPO Stock No. 001-019-00440-1; $3.25.)*

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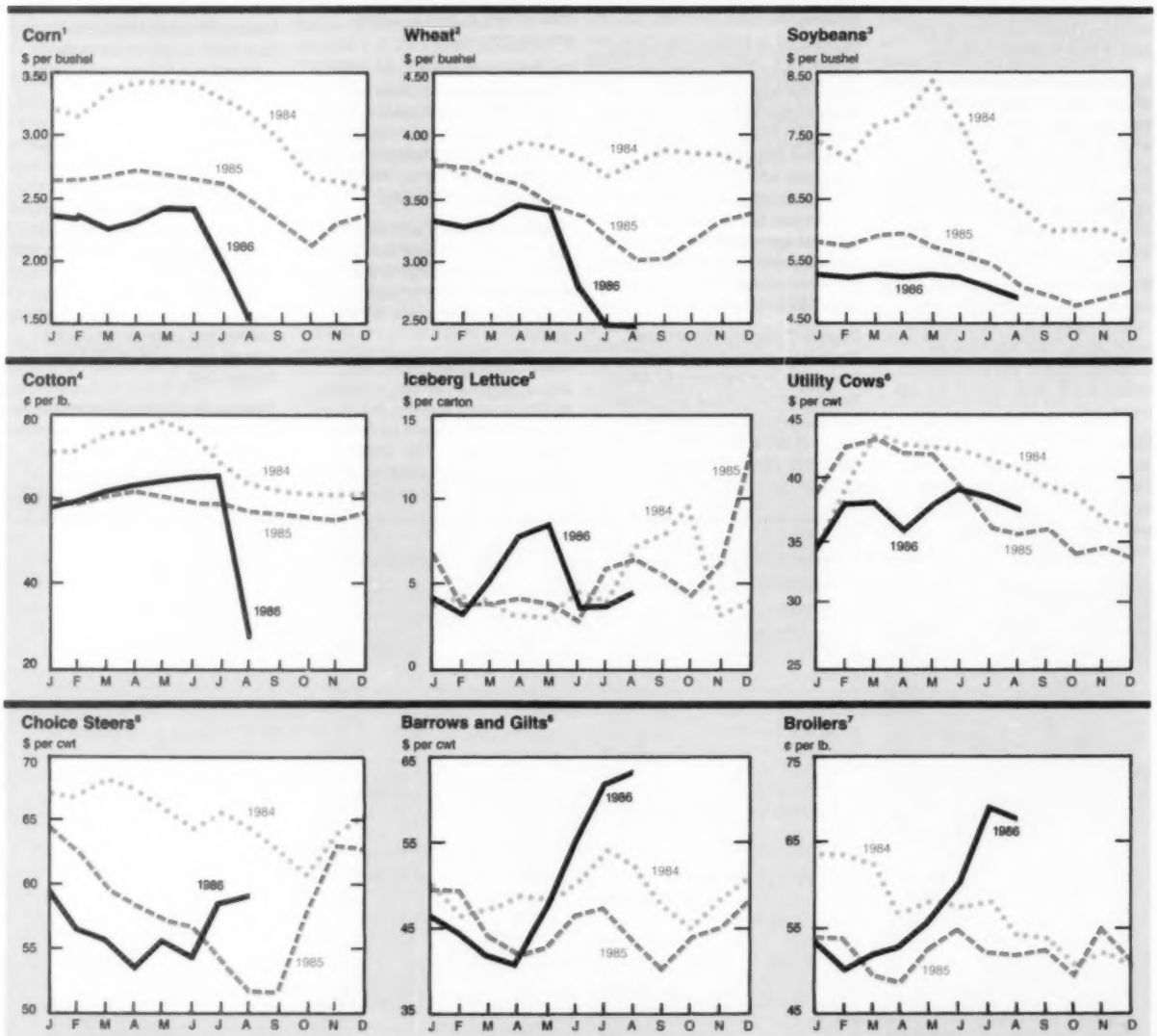
FARMLINE TRENDS

Monthly Price Monitor

USDA's August index of farm prices remained unchanged from July but was 3.3% above its year-earlier level. Corn prices sagged to $1.53 per bushel because of the certificate program, the lower loan rate, and prospects for a large harvest. Wheat held steady at $2.48, while soybeans were down 20¢ from July's average of $5.15. Cotton plunged to 26.8¢ from July's 65.7¢ a lb. as U.S. prices began reflecting world cotton prices. In the meat animals area, utility cows were down 76¢ to $37.62 per cwt, while choice steers increased to $59.02. Barrows and gilts rose to $63.68, up $20 from their August 1985 price. Broilers eased off slightly to 67.6¢ a lb., down 1½¢ from July's high but more than 15¢ above their year-ago level. All prices shown are monthly averages.



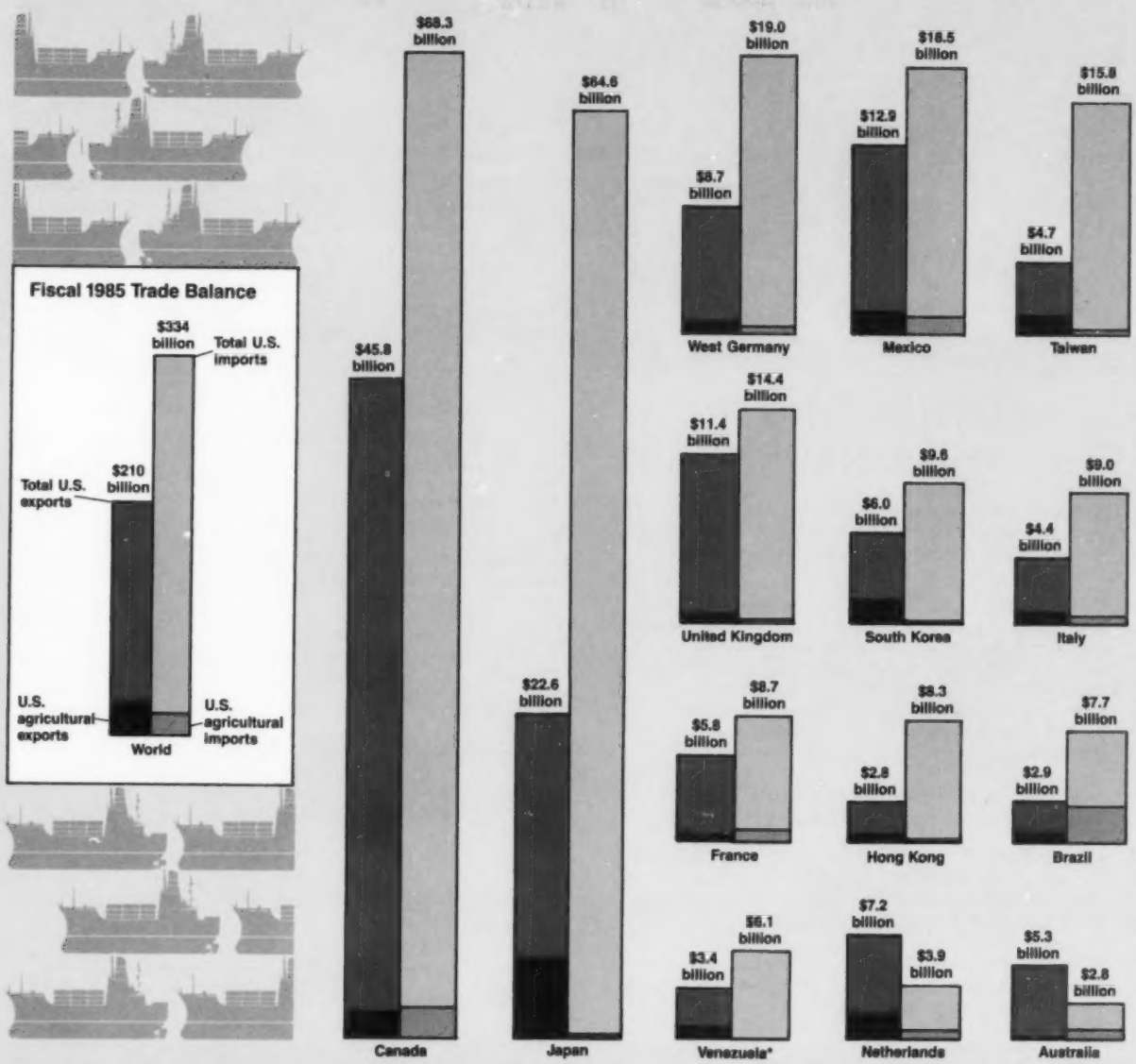
[1]No. 2 yellow, Central Illinois. [2]No. 1 HRW, Kansas City. [3]No. 1 yellow, Central Illinois. [4]SLM 1⅛" spot market price. [5]Standard carton 24's, California-Arizona. [6]Omaha. [7]Wholesale, New York.

Tracking U.S. Trade Deficits

Large U.S. trade deficits around the world now dwarf the positive contribution agriculture still makes to the nation's trade position. The U.S. deficit in total merchandise trade (nonfarm and farm goods) added up to more than $120 billion in fiscal 1985, as $334 billion worth of imports overshadowed $210 billion in exports.

The U.S.-Japanese imbalance accounted for a third of the overall deficit, but Japan wasn't the only problem. Most of our other major trading relationships also contributed to the deficit. The charts below present dollar figures for fiscal 1985 U.S. exports to, and imports from, several of our biggest trading partners.

While U.S. surpluses with other nations are few and far between, farm trade remains an important exception. U.S. agricultural exports continue to bring in more money than Americans spend on ag imports. True, the U.S. farm trade surplus has been shrinking. It declined to $11.5 billion last year, and it's expected to shrink to around $6 billion this year (the smallest surplus since 1972). In May 1986, the ag trade balance even slipped into the red for the first time in 15 years. But one or two monthly deficits won't tip the scales, say analysts. America's ag trade balance will still end up positive for 1986, and surpluses are expected to remain the rule for the foreseeable future.



Data are for the fiscal 1985 year (Oct. 1, 1984-Sept. 30, 1985) and were provided by economist Tom Warden of the Economic Research Service. Data cover only merchandise trade. Imports based on customs value. *U.S. agricultural imports from Venezuela were valued at less than $50 million.

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